AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A probe needle apparatus having a conductive central core with alternating layers of dielectric and conductive materials, comprising:

the conductive central core;

a first layer of dielectric material applied to maintain electrical access to the conductive central core while providing continuous isolation of the conductive central core elsewhere; and

a conductive driven guard layer applied around the first layer of dielectric material in electrical isolation from the conductive central core; and

wherein the conductive driven guard layer is applied on the first layer of dielectric material with a mask on an end of the conductive central core to prevent the conductive driven guard layer from touching the conductive central core.

2. (Original) The apparatus of claim 1, further comprising a protective non-conductive layer applied around the conductive driven guard layer to provide electrical and mechanical protection.

3. (Original) The apparatus of claim 2, wherein the first layer of dielectric material is coated by using a physical/chemical vapor deposition (P/CVD) of high temperature polymer.

Claim 4 (Canceled).

5. (Currently Amended) The apparatus of claim 4 2, wherein the protective non-conductive layer is applied on the conductive driven guard layer by spinning the conductive central core.

6. (Original) The apparatus of claim 5, wherein the protective non-conductive layer is applied on the conductive driven guard layer with a mask on the end of the conductive central core to prevent the protective non-conductive layer from touching the conductive central core.

Claim 7 (Canceled).

8. (Currently Amended) ~~The apparatus of claim 7,~~ A probe needle apparatus having a conductive central core with alternating layers of dielectric and conductive materials, comprising:

the conductive central core;

a first layer of dielectric material applied to maintain electrical access to the conductive central core while providing continuous isolation of the conductive central core elsewhere; and

a conductive driven guard layer applied around the first layer of dielectric material in electrical isolation from the conductive central core;

wherein the conductive driven guard layer is applied on the first layer of dielectric material and removed on an end by mechanical or chemical means to prevent the conductive driven guard layer from touching the conductive central core.

9. (Original) The apparatus of claim 8, wherein the protective non-conductive layer is applied on the conductive driven guard layer by using the chemical vapor deposition (P/CVD) of high temperature polymer.

10. (Currently Amended) A probe needle apparatus having a conductive central core with alternating layers of dielectric and conductive materials, comprising:

the conductive central core;

a first layer of dielectric material applied to maintain electrical access to the conductive central core while providing continuous isolation of the conductive central core elsewhere;

a conductive driven guard layer applied around the first layer of dielectric material in electrical isolation from the conductive central core;

a second layer of dielectric material applied to maintain electrical access to the conductive central core and the first layer of dielectric material while providing continuous isolation of the conductive central core and the conductive driven guard layer elsewhere; and

a second guard layer applied around the second layer of dielectric material;

wherein the conductive driven guard layer is applied on the first layer of dielectric material with a mask on an end of the conductive central core to prevent the conductive driven guard layer from touching the conductive central core.

11. (Original) The apparatus of claim 10, further comprising a protective non-conductive layer applied around the second conductive driven guard layer to provide electrical and mechanical protection.